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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,582	05/01/2001	Edward William Lindblad	50028.01US01	4863

7590 01/05/2005  
Timothy J. Lorenz  
INGRASSIA, FISHER, & LORENZ, P.C.  
7150 E. Cambelback Road  
Scottsdale, AZ 85251

EXAMINER
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NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/846,582

Applicant(s)

LINDBLAD ET AL.

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 13-18 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/7/01 and 10/3/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This Application has been examined. The claims 1-20 are pending. The examination results are as following.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US 5,745,092) in view of Raymond Becky (US 4,462,069).

Regarding claim 11, Ito discloses in figure 2, a liquid crystal display (LCD) device comprising a contrast-setting circuit for setting a contrast of an LCD panel, the contrast setting circuit including a voltage divider circuit (90) having an output (V10) determined the ratio of the resistors (72-75), and a variable resistive (70). However, Ito does not disclose a ratio of a first resistive subcircuit to a second resistive subcircuit, the second resistive subcircuit including at least two resistive components, at least one of the resistive components having an initially shorted state such that the at least one resistive component initially provides an insignificant amount of influence on the voltage divider circuit, and at least one resistive component being configured to influence the voltage divider circuit when a shunt associated with the at least one resistive component is severed. Raymond Becky discloses in figure 1B, a regulating circuit comprising output voltage dividing network having a first restive (R13) subcircuit to a second resistive

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subcircuit (R14) the second resistive subcircuit including at least two resistive components, at least one of the resistive components (R14, R15) having an initially shorted state such that the at least one of the resistive component initially provides an insignificant amount of influence on the voltage divider circuit when a shunt associated with the at least one resistive component is severed (see jumpers circuit J, see column 3, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a resistive network taught by Raymond Becky in lieu of variable resistor in the voltage divider of Ito because it would simply constitute an alternative choice of components performing the same function without bringing any unexpected result.

Regarding claim 12, Raymond Becky discloses in figure 1B, that the LCD device, wherein the shunt (see jumper J) associated with the at least one resistive component has been severed, thereby adding the influence of the at least one resistive component to the voltage divider circuit as discussed above.

Regarding claim 13, Raymond Becky discloses in figure 1B, that wherein the second resistive subcircuit further comprising at least four resistive components (R11-R15).

Regarding claims 14-16, Raymond Becky discloses that wherein the at least three resistive components each comprise a different resistive value, and therefore, it obvious wherein a first of the different resistive values is an even multiple of another of the different resistive values and increase in multiples of each lesser resistive value.

Regarding claims 17-18, Ito discloses the LCD device, further a substrate on which resides the contrast-setting circuit. Raymond Becky discloses an inherent a stub on which

extends the shunt (see Jumper J) associated with at least one resistive component, wherein severing the stub results in the shunt being severed, and also includes another separate stub for each of the at least one resistive components.

***Allowable Subject Matter***

3. Claims 1-10 are allowed.
4. Claims 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter:  
None of the cited art teaches or suggests that a method for manufacturing a LCD device or a liquid crystal display device having a contrast-setting circuit and a printed circuit flex comprising the a current contrast of the LCD device to determine an amount of deviation of the current contrast from an intended contrast, and if the current contrast of the liquid crystal display device deviates from the intended contrast, modifying the portion of the printed circuit flex such that the portion of the contrast- setting circuit changes from the first state to the second state as claim 1, or wherein the contrast-setting circuit resides in a printed circuit flex including a portion that is severable from the remainder of the printed circuit flex, the shunt extending onto the severable portion as claim 19.

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*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on (703) 305-4709.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D. C. 20231

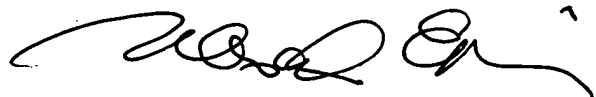
**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only).**

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen  
December 30, 2004



**ALEXANDER EISEN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2600**